

**DRAFT**  
**ENVIRONMENTAL ASSESSMENT**  
**CANTON LAKE, OKLAHOMA**  
**DAM SAFETY ASSURANCE EVALUATION**  
**CANTON, OK**

DRAFT  
FINDING OF NO SIGNIFICANT IMPACT

In accordance with the National Environmental Policy Act of 1969, including guidelines in 40 CFR 230, the U.S. Army Corps of Engineers, Tulsa District has assessed the environmental impacts of modifying the existing embankment of the Canton Spillway, Canton Lake, Oklahoma. The project consists of constructing a "Fusegated spillway" within the existing embankment of the Canton Lake spillway. The enclosed environmental assessment indicates the project would have no significant impact on the quality of the natural or human environment. Therefore, an environmental impact statement will not be prepared.

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Date

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Enclosure  
Environmental Assessment

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**I. PURPOSE AND DESCRIPTION OF THE PROJECT**

The purpose of the project is to modify the existing embankment at Canton Lake, Oklahoma, to adequately convey floodwaters of a 100% Probable Maximum Flood (PMF) into the North Canadian River tailwater, avoiding dam failure.

The stability of the Canton Dam spillway has been the subject of concern and discussion for over 25 years. Concerns focus on the amount of floodwater the dam can safely hold. The lake currently operates with pool restrictions that affect the dam's ability to provide flood protection to the level for which it was designed. These restrictions may cause downstream flooding that might not otherwise occur if the pool restrictions were not in effect.

The National Environmental Policy Act (NEPA) of 1969 (Public Law 91-190) requires all Federal agencies to address environmental impacts of any major Federal action on the natural and human environment. Guidance for complying with the NEPA is contained in Title 40 of the Code of Federal Regulations (CFR), Parts 1500 through 1508, and in Engineering Regulation (ER) 200-2-2, *Procedures for Implementing NEPA*. The primary intent of the NEPA is to ensure that environmental information is made available to public officials and citizens regarding major actions taken by Federal agencies. The purpose of this environmental assessment is to assure that construction of the proposed project complies with the intent of NEPA.

The project is located in Section 27, Township 19 North, Range 13 West, Blaine County, Oklahoma (see Figure 1). Canton Lake is located on the North Canadian River at river mile 394.3, about 2 miles north of the city of Canton, Oklahoma, which is about 75 miles northwest of Oklahoma City. Canton Lake was originally authorized by the Flood Control Act approved 28 June 1938 (Public Law 761, 75<sup>th</sup> Congress, Chapter 795, 3d Session, H.R. 10618) for flood control. It was modified by the Flood Control Act of 24 July 1946, to add irrigation and was further modified by the Flood Control Act of June 30, 1948 to add municipal water supply storage. The Water Resources Development Act of 1990 (Public Law 101, 101<sup>st</sup> Congress, 2<sup>nd</sup> Session, Section (y)) provided for all the irrigation storage to be municipal and industrial water supply storage and for reassignment from the city of Enid, Oklahoma to the city of Oklahoma City.

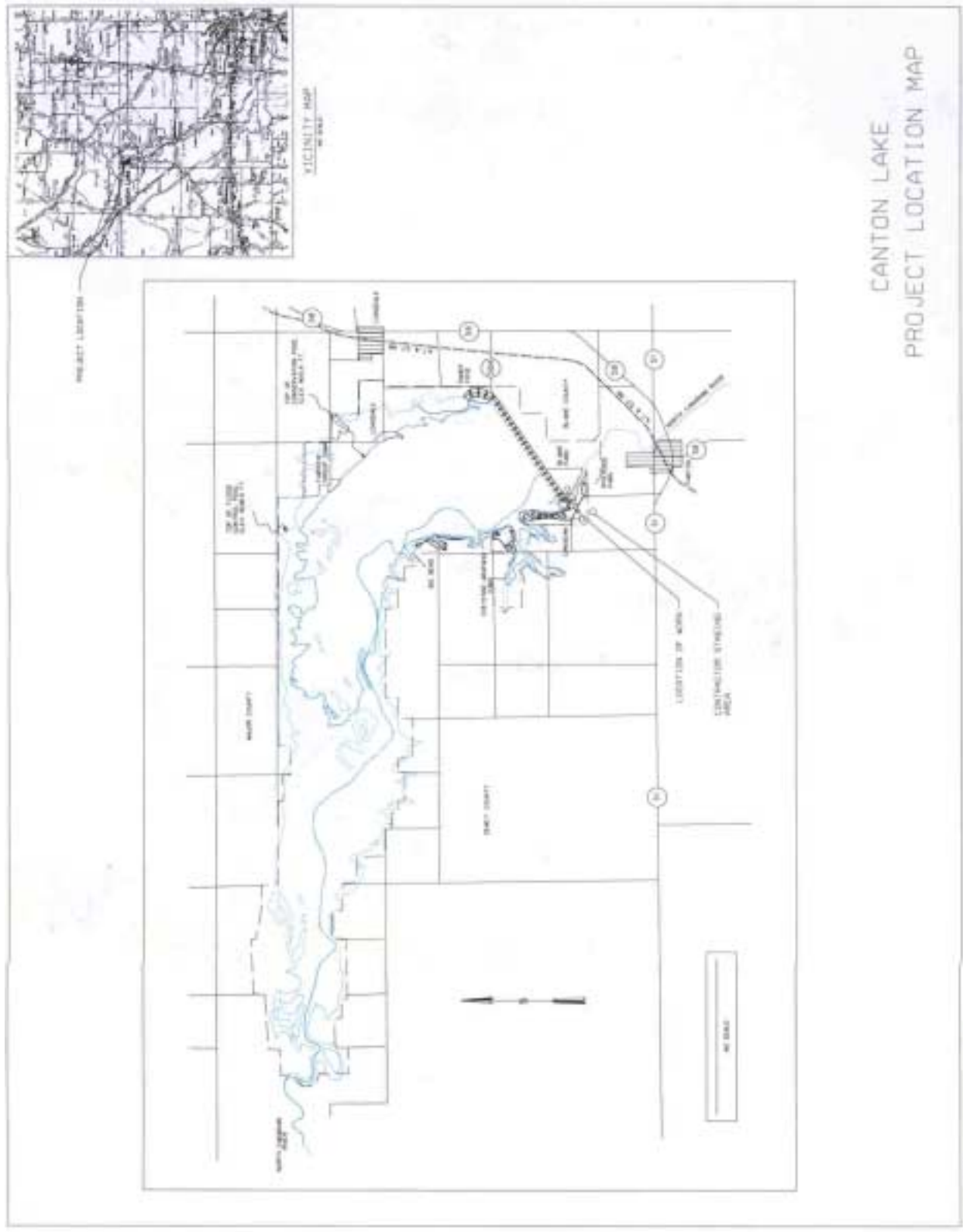


Figure 1.

Construction began in 1940 and was completed in January 1948. The top of dam is at elevation 1648.0 mean sea level (msl). The top of flood control pool is at elevation 1638.0 msl, with a flood control capacity of 377,100 acre-feet. The lake extends into Blaine and Dewey counties in Oklahoma.

## **II. ALTERNATIVES**

A total of ten alternative plans were considered during formulation of the project. A description of each plan follows:

**A. Raise the Dam (With) Freeboard.** This alternative would raise the existing dam embankment to a level acceptable to contain the PMF and maintain appropriate freeboard. Freeboard is additional height to the dam to insure an extra margin of safety. This alternative would add an additional 7.5 to 8.0 feet to the existing embankment. It is unlikely that the existing gated spillway section could pass the necessary flow without incurring problems associated with additional head. Due to limitations of the existing spillway, this alternative would not pass the design PMF discharge, and failure would most likely occur.

**B. Raise the Dam (Without) Freeboard.** This alternative would raise the existing dam embankment to a level acceptable to contain the PMF without freeboard. The project consists of adding an additional 1.5 to 2.0 feet to the existing embankment. It is unlikely that the existing gated spillway section could pass the necessary flow without incurring problems associated with additional head. Due to limitations of the existing spillway, this alternative would not pass the design PMF discharge, and failure would most likely occur. In addition, this alternative is not in accordance with current criteria because of the lack of appropriate freeboard.

**C. Uncontrolled Spillway.** This alternative would construct a new uncontrolled spillway at an unspecified location. The spillway would be concrete, with vertical walls and crest at elevation 1638.0 msl. Various spillway widths were analyzed and are shown in Table 1. Even with a spillway width of 16,000 feet, the PMF pool elevation would be 2 feet above the maximum pool. Spillway widths in excess of 16,000 feet would not be reasonable and would be quite expensive to construct.

TABLE 1

## ALTERNATIVE C PERTINENT DATA

Maximum Pool Elev. (feet)	Existing Spillway Q (cfs)	Uncontrolled Spillway		
		Design Q (cfs)	Width (feet)	Crest Elev. (feet)
1648.0	448,000	104,100	3,000	1638.0
1643.7	372,600	238,600	16,000	1638.0

**D. Fuse Plug Spillway, Dike 1 (North of Left Abutment).**

This alternative would construct a fuse plug spillway at Dike 1, which is located at the west end of the dam. Dike 1 would fail when the pool reached elevation 1638.0 msl and would erode to a concrete section constructed at the Dike 1 location. The concrete section would have vertical side slopes and a 2,400-foot bottom width, with crest at elevation 1630.0 msl. This controlled failure would be sufficient to prevent total failure of the embankment while maintaining sufficient freeboard. The 900-foot bottom width would prevent total failure of the embankment, but would not provide the necessary freeboard. This alternative meets existing criteria and would only be used during excessive flood events. The preliminary estimated cost for construction is \$20,800,000 and does not include real estate costs for acquisition of additional lands. See Table 2.

TABLE 2

## ALTERNATIVE D PERTINENT DATA

Maximum Pool Elev. (feet)	Existing Spillway Q (cfs)	Controlled Failure @ Dike 1		
		Design Q (cfs)	Bottom Width (feet)	Min. Elev. (feet)
1641.4	331,300	276,000	2,400	1630.0
1645.4	403,800	163,800	900	1630.0

**E. Fuse Plug Spillway.** This alternative consists of constructing an earthen fuse plug spillway, much like the one for Alternative D, within the left embankment. The fuse plug would have a crest elevation of 1638.0 msl. In the event of a PMF event, the fuse plug would begin to fail at elevation 1638.0 msl and completely fail before the pool elevation became more than 1641.4 msl. The fuse plug would erode to a base elevation of 1625.0 msl, as shown in Table 3. The entire structure would

require heavy concrete paving to handle high water velocities; however, a downstream channel would not be required other than paving the back slope of the spillway. The width of the fuse plug spillway would be 1,340 feet to pass 269,350 cubic feet per second (cfs) flow for the PMF. This would be sufficient to prevent total failure of the embankment while maintaining necessary freeboard. This alternative meets existing criteria and would only be used during an excessive flood event. However, it is not considered a viable option because the possibility exists for wave action to prematurely erode the fuseplug and fail before its intended time. The preliminary estimated cost is \$20,000,000.

**TABLE 3**

**ALTERNATIVE E PERTINENT DATA**

Maximum Pool Elev. (feet)	Existing Spillway Q (cfs)	Controlled Failure Left Abutment		
		Design Q (cfs)	Bottom Width (feet)	Min. Elev. (feet)
1641.4	331,600	269,350	1,340	1625.0
1641.7	339,000	260,400	1,270	1625.0

**E(1) Fusegated Spillway.** This alternative consists of constructing a Fusegated concrete spillway platform within the left embankment. The Fusegate System comprises a set of independent units placed on a concrete spillway sill which start to overturn in a predetermined order when a flood of significant magnitude occurs. This arrangement allows for triggering only the tipping of the number of Fusegates required to pass safely a given flood and for having a progressive release of the water during major flood events. The base of the fusegates would be set at elevation 1625 msl and the crest at elevation 1638 msl. This alternative meets existing criteria and would only be used during an excessive flood event. The preliminary estimated cost is \$28,000,000

**F. Additional Gated Spillway.** This alternative would require construction of a new concrete gated spillway much like the existing spillway. The new spillway would be sized using the same gate sizes and crest elevation as the existing spillway. To contain the PMF with appropriate freeboard, a new spillway with 13 additional gates would be needed. The preliminary cost is estimated at \$50,700,000. See Table 4.

TABLE 4

## ALTERNATIVE F PERTINENT DATA

Maximum Pool Elev. (feet)	Existing Spillway Q (cfs)	Auxiliary Gated Spillway		
		Design Q (cfs)	Crest Elev. (feet)	No. of Gates
1641.4	331,800	265,700	1613.0	13

**G. Reduction of Flood Control Storage.** This alternative would reduce the lake's flood control pool elevation to a maximum elevation of 1626.0 msl. Routing of the PMF would result in a maximum outflow of 510,000 cfs and maximum routed pool elevation of 1649.0 msl. The PMF would still overtop the embankment and cause failure. Further reduction of the flood pool would eliminate the majority of effective flood storage, reduce flood protection downstream, and compromise the intended purpose of the original design.

**H. Overtop Flow.** This alternative would allow flow over the top of the embankment. The maximum routed PMF pool would be at elevation 1649.7 msl. This would require concrete or equivalent protection of the embankment for the entire length, approximately 15,000 feet. This alternative would be quite expensive, and overtopping of the embankment is not a viable alternative.

**I. No Action.** This alternative would be nonstructural, leaving the existing spillway in place.

All alternatives were analyzed. Of the ten alternatives evaluated, Plan E(1), the Fusegated spillway is the preferred alternative. This alternative would best satisfy the objective of preventing dam failure at 100% PMF.

### III. AFFECTED ENVIRONMENT

**A. Location.** Canton Lake is located in portions of Blaine and Dewey counties, Oklahoma. The region around Canton Lake is characterized by rolling plains through which the North Canadian River flows in an open alluvial valley in the Dog Creek Formation. The dam site is on the North Canadian River at river mile 394.3, about 2 miles north of the city of Canton, Oklahoma, which is about 75 miles northwest of Oklahoma City.

**B. Climate.** The environment around Canton has moderate

winters and comparatively long, hot summers. The average annual temperature from 1961 to 1990 was 60 °Fahrenheit (F). The average monthly temperature ranges from 35.1 °F in January to 82.6 °F in July for the same reporting period.

Typically, spring is the wettest season and winter the driest. Heaviest daily rainfall usually occurs in April, May, June, and September.

**C. Storms of Record and Flood History.** The flood of October 1923 is the largest flood of record at the Canton dam site. Rainfall averaging 3.42 inches above Canton Dam occurred October 9-16, 1923, following a period of heavy rainfall that saturated the watershed. Peak flow was estimated at 80,000 - 90,000 cfs. The May 1951 flood was produced by rainfall which occurred May 13-18, 1951, and averaged 5.74 inches above Canton Dam. The volume of runoff at Canton Dam was 221,600 acre-feet. Since impoundment of water began at Canton Lake in 1948, the maximum experienced high water occurred on May 25, 1951, at elevation 1628.05 msl. Flood damages prevented by operation of the project through September 1999 are estimated to be \$14,368,100. Flood damages prevented in Fiscal Year 1999 were \$1,376,500.

**D. Social and Economic Conditions.**

**1. Study Area.** The project alternatives involve modifications to an existing dam and associated facilities at Canton Lake, Oklahoma. The alternatives would have the most direct impact on persons living in Blaine and Dewey counties in Oklahoma. Canton Lake is located on the North Canadian River within the two northwestern counties of the state. The town of Canton is immediately downstream of the dam. The lake provides water supply, flood control, and recreation for the region's populations, including counties along the North Canadian River.

**2. Population.** The State of Oklahoma estimates that Blaine and Dewey counties have populations of 10,300 and 4,900, respectively. According to the State's estimates, Blaine County's population declined 10.3% from the 1990 Census count, while Dewey County's population declined by 12.5%. The area is primarily rural, and population trends have followed declines found in other remote rural counties with limited job opportunities.

**3. Employment.** In 1999, the State of Oklahoma Department of Commerce estimated that 6,900 residents were employed in the two counties. The 1999 unemployment rate for Blaine County was 3.6%, similar to the State of Oklahoma unemployment rate of 3.6%. The Dewey County labor force maintained an unemployment rate of 3.8%. Retail trade and services are the two largest employment sectors. About 26% of

the two counties' labor force work in services, while 15% of the labor force is employed in retail trade. The construction sector employs 7% of the labor force.

4. **Income.** The 1998 per capita income for Blaine County was \$19,700 and for Dewey County was \$19,306. This compares with the 1998 per capita income for the State of Oklahoma of \$22,000. Median household income figures for Blaine and Dewey Counties were \$27,300 and \$26,900, respectively. These figures compare to the State median income level of \$30,000. Recreation activity associated with Canton Lake is an important part of local economic conditions. Consequently, the presence of the lake directly and indirectly provides employment opportunities and generates income for residents in the two counties.

5. **Social Ecology.** Social conditions include family, cultural activities, education, commuting, recreation, and other social activities in which the area population participates. Conditions addressed in this analysis also include public services that meet the population's basic needs, health and social well being. Social ecology refers to the geo-spatial distribution of human activities. Most of the residents live in small towns of less than 3,000 population. Many residents live in rural areas. Much of the lands are used for growing crops and grazing livestock. The towns of Canton, population 500, and Watonga, population 3,000, are the largest communities in Blaine County. The town of Seiling, population 700, is located west of Canton Lake and is the largest community in Dewey County. These communities serve as area centers for employment, education, health care, and other social, cultural, and political activities. Canton Lake is a popular recreation site. U.S. Army Corps of Engineers visitation data indicate that over 890,000 people visited the lake in 1998. Visitors come from Oklahoma, Kansas, and Texas to participate in water-based recreation. A number of communities, rural residences, railways, highways, and communication links are located downstream of Canton Dam. Operation of the dam provides flood protection for much of this area.

The Oklahoma City metropolitan area is the largest urban area below the dam. Although the lake does not provide flood protection for this area, a breach of the dam could result in major flooding. Because of the distance from the dam, early warning of such an event facilitates evacuation. However, flows from a dam breach would be a threat to human life and would result in substantial property damage.

## **E. Natural Resources.**

1. **Soil Types.** The soil association found within the proposed project area is the Canadian-Port-Lincoln Association. This association consists of deep, loamy and sandy soils that are

formed in alluvium. These soils are nearly level and occur principally in river valleys and in smaller areas along larger streams. The total area of this soil association is about 12% of the county. Canadian soils make up 20% of the association; Port soils, 15%; Lincoln soils, 10%; and minor soils, 55%.

The Canadian Series consist of deep, dark-colored, nearly-level, loamy soils. These soils are found at the toe of the existing embankment and along the North Canadian River. Canadian soils are naturally well drained. Internal drainage is medium, and permeability is moderately rapid. The ability of these soils to absorb and hold moisture is moderate, and they are medium in natural fertility. When tilled, they are susceptible to wind erosion. Most areas of Canadian soils are cultivated. They are suited to small grains, grain sorghums, cotton, alfalfa, and grass.

The Lincoln Series consist of nearly level brown soils on mixed sandy and loamy alluvium. These soils are present below the existing embankment and along the North Canadian River. The surface layer is brown, calcareous, loamy, fine sand of granular structure. This layer is about 12 inches thick and easy to till. The underlying material, consisting of calcareous sandy alluvium, is also stratified. It is easy for plant roots to penetrate. Lincoln soils are well drained, and internal drainage and permeability are rapid. The ability of Lincoln soils to absorb and retain moisture is low. They have low natural fertility and are occasionally flooded.

The Port Series consist of deep, loamy soils. These nearly level soils are in the northeastern part of the county on floodplains, but they are above the level that ordinarily is flooded. These soils are not found within the immediate area of the project. The surface layer is reddish-brown or dark-brown calcareous loam or clay loam of granular structure. This layer is about 10 inches thick and easy to moderately difficult to till. Port soils are naturally well drained. Internal drainage is medium, and permeability is moderately slow. The ability of these soils to absorb and retain soil moisture is moderate. Natural fertility is high.

The Wann Series is the primary minor soil complex of the Canadian-Port-Lincoln Association present at the base of the embankment. The Wann soils complex consists of deep, dark-colored, nearly-level soils on sandy alluvium. Wann soils are somewhat poorly drained. Internal drainage is rapid, and permeability is moderately rapid. The ability of these soils to absorb and retain moisture is low. Keeping a cover of grasses on these soils lessens damage by scouring or deposition.

**2. Prime Farmland.** According to the U.S. Department of Agriculture (USDA), the definition of "prime farmland" is soil that is best suited for producing food, feed, forage, fiber, and

oilseed crops. Blaine County has 37 soils classified as prime farmland (USDA, 1983). Canadian, Port, and Wann loams are considered prime farmland. The Canadian and Wann series occur below the existing embankment. The Oklahoma Department of Wildlife Conservation (ODWC) manages approximately 640 acres below the embankment as part of the Canton Wildlife Management Area. Approximately 96 acres are managed as share crop fields and 42 acres are planted for wildlife. Crops planted include millet, cowpeas, winter wheat, maize, alfalfa, and sunflower.

**3. Unique Farmland.** According to the USDA, the definition of "unique" farmland is land other than prime farmland that is used for production of specific high value food and fiber crops, such as citrus, tree nuts, olives, cranberries, fruits, and vegetables (7 U.S.C. 4201(c)(1)(B)). There are no farmlands in Blaine County classified as unique by the USDA.

**4. Wild and Scenic Rivers.** The North Canadian River is not classified as wild and scenic by the State of Oklahoma or the Federal Government pursuant to the Federal Wild and Scenic Rivers Act, Public Law 90-542.

**5. Plants.** The project area is within the Prairie Division, Tall-grass Prairie Province as described by Bailey (1980). It lies within the Bluestem-Grama Prairie Sections of the Tall-grass Prairie Province. This flat to gently rolling plain is developed on Permian Redbeds. The grasslands consist of mixed grasses, which are transitional from the tall grasses in the east to the short-grass plains in the west. The principal grasses are big bluestem, switchgrass, Indian grass, little bluestem, blue grama, sideoats grama, and buffalo grass. Natural forest growth is of two broad types: (1) on the sandy soils of the uplands are blackjack oak and burr oak, and (2) along the bottomland and deeper canyons are a growth of trees consisting of white elm, cottonwood, green ash, hackberry, shin oak, western walnut, and red cedar. Shrubs and other woody plants of the area are wild plum, buckbrush, smooth sumac, rough leaf dogwood, grape, and poison ivy.

**6. Aquatic Community.** Canton Lake provides a diverse and vital aquatic habitat. At top of conservation pool, the lake contains 97,900 acre-feet of water with a surface area of 7,900 acres. First impounded in April 1948, Canton Lake is managed by the ODWC as a major game fisheries resource. Canton Lake provides fishing for several species of sport fishes. The walleye population has spawned naturally in the lake since 1965 and is a major source of walleye and saugeye stockings in Oklahoma. Major native sport fish present in the lake are largemouth bass, crappie, white bass, and channel catfish. Other common species found in the lake include carp, river carpsucker, freshwater drum, black bullhead, gizzard shad, logperch, buffalo, spotted gar, Mississippi silverside, and various species of sunfish and minnows.

7. **Wetlands.** Wetlands are defined as "areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions". According to U.S. Fish and Wildlife Service National Wetland Inventory maps of the project area, palustrine, forested, broad-leaved deciduous, temporary flooded wetlands occur below the existing embankment and adjacent to the proposed construction site. However, these wetlands should not be impacted by the project. Also existing below the embankment and in the surrounding project area are palustrine, emergent, persistent, seasonally-flooded wetlands; palustrine, scrub-shrub, broad-leaved deciduous, temporarily-flooded wetlands; and palustrine, emergent, persistent, temporarily-flooded wetlands.

8. **Wildlife.**

a. **Mammals.** The primary big game species that occurs in significant numbers within the project area is white-tailed deer. Other game species occurring include fox squirrels, cottontail rabbits, blacktail jackrabbits, and grey fox. The area supports populations of striped skunk, coyote, spotted skunk, prairie dog, opossum, badger, and bobcats. Beaver occur in some numbers, as do muskrat, mink, badger, and raccoon.

b. **Reptiles and Amphibians.** The North Canadian River provides habitat for both reptiles and amphibians. Those species most likely to occur in the project area include yellow mud turtle, common snapping turtle, prairie lined racerunner lizard, Eastern collard lizard, Great Plains skink, Texas horned Lizard, Eastern yellow-bellied racer, Western diamond-back rattlesnake, ringneck snake, Great Plains rat snake, Texas night snake, milk snake, black rat snake, coach whip snake, Diamond-back water snake, Western rough green snake, bull snake, Great Plains ground snake, and checkered garter snake,

c. **Birds.** Waterfowl populations on Canton Lake include American Green-winged Teal, Mallard, Northern Pintail, Northern Shoveler. Principal game birds are the bobwhite quail, dove, ringneck pheasant, and wild turkey. Other birds observed in the area include Great Blue Heron, American White Pelican, Double-crested Cormorant, Turkey Vulture, Swainson's Hawk, American Coot, Morning Dove, Barn Owl, Common Nighthawk, Downy Woodpecker, Northern Flicker, Cliff Swallow, Barn Swallow, American Crow, American Robin, European Starling, Northern Cardinal, American Tree Sparrow, Vesper Sparrow, Lark Sparrow, Harris Sparrow, Red-winged Blackbird, Eastern Meadowlark, Western Meadowlark, Common Grackle, and American Goldfinch

F. **Threatened and Endangered Species.** According to the U.S. Fish and Wildlife Service (USFWS), four Federally listed

endangered/threatened species may occur in the general project area.

The Arkansas River shiner is a small fish found in the Canadian River in New Mexico, Oklahoma, and Texas, and the Cimarron River in Kansas and Oklahoma. Both rivers are in the Arkansas River Basin. The Arkansas River shiner has historically occurred in the North Canadian River, but recent surveys have not found this species to occur in the North Canadian River near Canton Lake. The Arkansas River shiner is listed as Threatened (63 FR 64772, November 23, 1998), and critical habitat has been proposed just upstream of Canton Reservoir (65 FR 4057, June 30, 2000). Adult Arkansas River shiners are uncommon in quiet pools or backwaters, and almost never occur in tributaries having deep water and bottoms of mud or stone. The Arkansas River Basin population is threatened by habitat destruction and modifications from stream dewatering or depletion due to diversion of surface water and groundwater pumping, construction of impoundments, and water quality degradation.

Bald Eagles may occasionally occur during winter months along large rivers and lakes. Bald Eagles were listed as endangered (32 FR 4001, March 11, 1967; 43 FR 6233, February 14, 1978) and then down listed to threatened (60 FR 3600, July 12, 1995) and were recently proposed for de-listing due to successful recovery efforts (64 FR 36454, July 6, 1999). The recovery is due in part to habitat protection and management actions initiated under the Endangered Species Act. It is also due to reduction in levels of persistent organochlorine pesticides such as DDT occurring in the environment. No critical habitat has been designated for this species. Bald Eagles require large trees or cliffs for nesting, preferably near water with an abundance of fish. They spend the winters along major reservoirs or in areas where carrion is available for food. The reasons for decline of this species include loss of riparian habitat, pesticide-induced reproductive failure, and human disturbance.

Interior Least Terns may occasionally migrate through the area to more favorable breeding sites along the South Canadian, Cimarron, and Red rivers. Interior Least Terns are listed as endangered (50 FR 21784, May 28, 1985). No critical habitat has been designated for this species. Interior Least Terns favor islands or sandbars along large rivers for nesting. Least Terns prefer shallow water for fishing, and water levels must be low enough so that nests stay dry. Flooding of nesting areas by reservoirs and channelization projects and overgrowth of brush and trees eliminating remaining habitats are reasons for decline of the Interior Least Terns.

Whooping Cranes may be seen in the project area each spring and fall during migration. The Whooping Crane is listed as endangered (32 FR 4001, March 11, 1967; 35 FR 8495, June 2, 1970). Critical habitat has been designated (43 FR 20938,

May 15, 1978). Whooping Cranes inhabit marshes and prairie potholes in the summer and are found in coastal marshes and prairies in winter. They have declined primarily because of loss of wintering and breeding habitat. Shooting and collisions with power lines or fences have been sources of mortality in recent years.

**G. Cultural Resources.** Limited archeological surveys within the Canton Lake area during the past 50 years have resulted in the recording of five prehistoric and historic archeological sites. In addition to these archeological sites, the Canton Lake dam itself is considered a historic property. The dam is a 15,140-foot-long, rolled earthfill structure, with a 640-foot gated, concrete spillway, that rises to a maximum height of 68 feet above the streambed. It is one of the earlier dams constructed by the U.S. Army Corps of Engineers in the State of Oklahoma. Construction of Canton Dam began in 1940, was temporarily halted during World War II, and was completed in 1948. The Canton Lake dam has been determined to be eligible for listing on the National Register of Historic Places due to its association with the implementation of early Federal flood control and multipurpose river basin development and as a significant early engineering structure constructed by the U.S. Army Corps of Engineers in the State of Oklahoma (see Appendix I).

**H. Air Quality.** The U.S. Environmental Protection Agency (EPA) published a Conformity Rule on November 30, 1993, requiring all Federal actions to conform to appropriate State Implementation Plans (SIPs) which were established to improve ambient air quality. At this time, the Conformity Rule only applies to Federal actions in non-attainment areas. A non-attainment area is an area that does not meet one or more of the National Ambient Air Quality Standards for the criteria pollutants designated in the Clean Air Act (CAA).

To comply with this rule, a conformity determination based on air emission analysis is required for each proposed Federal action within a non-attainment area. This geographical region is in attainment and meets the National Air Quality Standards for the criteria pollutants designated in the CAA. Consequently, a conformity determination is not required.

**I. Hazardous, Toxic, and Radiological Waste.** Potential for discovery of hazardous material during construction of the Fusegated Spillway Project on the earth-fill embankment at Canton Lake was evaluated through examination of historic and current land use, review of environmental data bases, interviews with local regulatory personnel, and visual observations. Avoidance of HTRW during construction is desirable in order to minimize project delays, remediation costs, and environmental damage.

Lands in the project area are primarily composed of

undeveloped grasslands, pasture and agricultural lands. As such, these lands have not been subject to industrial development or other land use activities with associated potential for significant contamination. In addition, lands in close proximity to the project area share similar land uses and have a low potential for contaminant transport to the project. Accordingly, there is no reason to believe that environmental media in the project area have been significantly contaminated by past or current land practices or by releases from adjoining properties.

A search of environmental databases revealed no documented areas of contamination near the project location. A search of the Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS) database failed to produce any sites in the Blaine County area. An additional search was performed in the Resource Conservation and Recovery Information System (RCRIS) Database for the area. This search also failed to produce any small quantity generators in the Blaine County area or Fuseplug Spillway Project on the earth-fill embankment at Canton Lake location. Based on this information from environmental databases, there is a low probability of HTRW related problems from documented areas of local contamination.

In addition to searches of environmental databases, local personnel from the Canton Lake Office were contacted for information related to potential areas of contamination that could affect project construction or operation. All contacted individuals were unaware of any HTRW related issues near the site.

Finally, a site visit was conducted and included a search for visual evidence of potential HTRW-related problems. This involved walking the project area as well as visual reconnaissance of surrounding areas. Areas of soil staining, evidence of unusual vegetative distress, drums of containerized waste, unusual topography (mounds or depressions), or other visual evidence of potential contamination were not noted at any location.

Based on these findings of this survey, the potential for discovery and significant problems related to HTRW during project construction or operation is believed to be low.

#### **IV. ENVIRONMENTAL IMPACTS OF THE PREFERRED ALTERNATIVE.**

A summary of environmental impacts is presented in Table 5, Impact Assessment Matrix.

##### **A. Socioeconomic Resources.**

1. **Population.** Population trends of the past decade would continue. Limited job opportunities would continue to be linked to future population dynamics in the area. Construction

would create short-term employment opportunities. Dam safety measures would reduce the probability of dam failure and associated population losses. Under without-project conditions, in the rare event of a dam breach, the resultant flood would cause mass evacuation of populations living in flooded areas, along with substantial property loss. Such an event would directly result in population decline in the area, as many displaced residents would not return to the area.

2. **Employment.** Construction activity would cause short-term increases in employment opportunities. With the project, the probability of dam failure and associated economic losses, including employment losses, would be reduced. Under without-project conditions, employment trends and job opportunities would continue to follow past area trends. In the rare event of a dam breach, the resultant flood would cause substantial property loss and displacement of places of employment. Such an event would directly result in a decline of employment in Blaine and Dewey counties, as well as in counties downstream of the dam.

3. **Income.** Construction-related expenditures would temporarily increase area income. With the project, the probability of dam failure and associated economic losses, including losses in income, would be reduced. Under without-project conditions, income levels would change at a slower rate than the rest of the state. Under a rare event of a dam breach, the resultant flood would cause substantial property loss and displacement of places of employment resulting in a decline of income in Blaine and Dewey counties, as well as in counties downstream of the dam.

4. **Social Ecology.** With the project, the social trends of the past decade would continue. Construction would temporarily disrupt traffic on State Highway 58A, diverting at times an average traffic count of 500 vehicles a day. Depending on timing of the construction, dropping of the Canton Lake pool to accommodate construction could disrupt recreation activities of an estimated 2,500 visitors that use the lake each day. However, the planned reduction of the pool by less than 2 feet and the construction schedule would minimize those impacts. This dam safety measure would reduce the probability of dam failure and associated disruption to social activities. By providing protection for a dam breach event, the measure enhances the health and safety of the population living in the area. Without the project, under a rare event of a dam breach, the resultant flood would cause substantial potential for loss of life and decrease in safety and social well being. Under such an event, recreation at Canton Lake would be disrupted. Transportation and communication also would be disrupted. A dam breach flood event would adversely impact the social conditions of Blaine and Dewey counties as well as conditions of populations downstream.

5. **Social Justice.** There would be no significant impacts on the health and well being of minority and low-income populations to a greater degree than other populations. The proposed project would not substantially affect health and safety risks to children.

B. **Natural Resources.** Construction activities associated with spillway construction would be limited to project lands. These activities would take place on previously disturbed lands impacted by construction of the dam and addressed by the project Environmental Impact Statement. Construction of the concrete apron would take place during late summer when lake levels are normally at their lowest. Lake levels are not expected to drop below 1612.5 feet msl, 2.5 feet below the normal conservation pool. Impacts to the walleye fishery should not be any greater than is normally expected during this time of the year.

C. **Floodplains and Wetlands.**

1. **Section 404.** This action is not subject to regulation pursuant to Section 404 of the Clean Water Act, and a Department of Army (DA) permit is not required (Appendix II).

2. **Floodplains.** Floodplains associated with this area would not be negatively impacted by construction of this project. Successful completion of the project would positively affect floodplains downstream of Canton Lake by providing protection against a 100% PMF for the town of Canton, Oklahoma City, and surrounding areas. Canton Reservoir, as designed, is considered the minimum storage desirable for protection of Oklahoma City and is operated to provide flood protection downstream as far as the upper limits of Lake Eufaula. Continued dependence on a substandard spillway that cannot handle a 100% PMF may result in failure of the dam resulting in damage to most of the town of Canton and surrounding areas.

**TABLE 5**  
**IMPACT ASSESSMENT MATRIX**

Name of Parameter	Magnitude of Probable Impact						
	Increasing Beneficial Impact			No Appreciable Effect	Increasing Adverse Impact		
	Significant	Substantial	Minor		Minor	Substantial	Significant
A. Social Effects							
1. Noise Levels				X			
2. Aesthetic Values				X			
3. Recreational Opportunities				X			
4. Transportation				X			
5. Public Health and Safety	X						
6. Community Cohesion (Sense of Unity)				X			
7. Community Growth and Development				X			
8. Business and Home Relocations	X						
9. Existing/Potential Land Use				X			
10. Controversy				X			
B. Economic Effects							
1. Property Values	X						
2. Tax Revenues				X			
3. Public Facilities and Services	X			X			
4. Regional Growth				X			
5. Employment				X			
6. Business Activity				X			
7. Farmland/Food Supply				X			
8. Commercial Navigation				X			
9. Flooding Effects	X						
10. Energy Needs and Resources				X			
C. Natural Resource Effects							
1. Air Quality				X			
2. Terrestrial Habitat				X			
3. Wetlands				X			
4. Aquatic Habitat				X			
5. Habitat Diversity and Interspersion				X			
6. Biological Productivity				X			
7. Surface Water Quality				X			
8. Water Supply				X			
9. Groundwater				X			
10. Soils				X			
11. Threatened or Endangered Species				X			
D. Cultural Resources							
1. Historic Architectural Values						X	
2. Pre-Historic & Historic Archeological Values				X			

**D. Threatened and Endangered Species.** The project should have no effect on Federally-listed threatened and endangered species (Appendix I).

**E. Cultural Resources.** None of the identified prehistoric or historic archeological sites at Canton Lake would be impacted by the proposed project. However, construction of the proposed fuse plug within the actual dam would have an impact on National Register of Historic Places eligible property. In accordance with Section 106 of the National Historic Preservation Act, Tulsa District will coordinate the potential impacts of the project on this historic property with the Oklahoma State Historic Preservation Office. If any documentation or mitigation is required as result of this consultation, it will be completed prior to the start of the project.

**F. Prime and Unique Farmland.** Although the National Resource Conservation Service has classified Canadian fine sandy loam and Wann loams as Prime Farmland, these soils in the project area do not fall under protection by the Farmland Protection Policy Act because they were committed to water storage prior to enactment of this law (reference: 7 CFR, Ch. VI, Part 658, 1-1-89).

**G. Water Quality.** While temporary and localized impacts on Canton Lake water quality might occur during the construction phase of the project, long-term water quality impacts would not be anticipated. Localized construction-related impacts might include slightly increased turbidity in the immediate area of spillway construction. In addition, the potential exists for temporary introduction of concrete-related constituents or other common materials associated with construction activities. Once the project is completed, however, impacts on lake water quality should be minimal. Erosion of fuse plug materials during a major flood event would most likely result in increased turbidity and sediment transport downstream of Canton Lake. However, sediment loads of flood flows are typically high, and increases associated with fuse plug materials erosion would most likely be insignificant during these time periods.

**H. Air Quality.** Construction related and site development impacts on air quality may result from temporary fugitive dust (particulate) emissions in and around the project site. All appropriate actions will be taken to limit the dispersal of particulate matter. A temporary increase in exhaust emissions from construction equipment would also be expected during construction of the proposed project.

**I. Noise.** During construction, there would be an increase in noise, but this would be temporary and last only during the construction period.

**J. Cumulative Effects.** No cumulative effects are anticipated due to the proposed project.

**V. MITIGATION**

The proposed project would not have a negative impact on the existing human or natural environment. Construction disturbance would be limited to the existing embankment. Areas disturbed during construction would be returned to their original condition prior to construction.

**VI. FEDERAL, STATE, AND LOCAL AGENCY COORDINATION**

The draft environmental assessment was coordinated with the following agencies having legislative and administrative responsibilities for environmental protection.

- U.S. Environmental Protection Agency
- U.S. Fish and Wildlife Service
- U.S. Geological Survey
- Natural Resources Conservation Service
- Oklahoma Archaeological Survey
- Oklahoma Department of Environmental Quality
- Oklahoma Department of Wildlife Conservation
- Oklahoma State Historic Preservation Officer
- Oklahoma Water Resources Board
- Native American Tribes
- City of Canton, OK
- City of Enid, OK
- City of Oklahoma City, OK

## VII. APPLICABLE ENVIRONMENTAL LAWS AND REGULATIONS

TABLE 6

### RELATIONSHIP OF PLANS TO ENVIRONMENTAL PROTECTION STATUTES AND OTHER ENVIRONMENTAL REQUIREMENTS

Policies	Compliance of Alternatives
<u>Federal</u>	
Archaeological and Historic Preservation Act, 1974, as amended, 16 U.S.C.469, <u>et seq</u>	*All plans in full compliance
Clean Air Act, as amended, 42 U.S.C. 7609, <u>et seq</u>	All plans in full compliance
Clean Water Act, 1977, as amended (Federal Water Pollution Control Act, 33 U.S.C. 1251, <u>et seq</u>	All plans in full compliance
Endangered Species Act, 1973, as amended, 16 U.S.C.1531, <u>et seq</u>	All plans in full compliance
Federal Water Project Recreation Act, as amended, 16 U.S.C. 460-1-12, <u>et seq</u>	All plans in full compliance
Fish and Wildlife Coordination Act, as amended, 16 U.S.C. 661, <u>et seq</u>	All plans in full compliance
Land and Water Conservation Fund Act, 1965, as amended, 16 U.S.C. 4601, <u>et seq</u>	All plans in full compliance
National Historic Preservation Act, 1966, as amended, 16 U.S.C. 470a, <u>et seq</u>	*All plans in full compliance
National Environmental Policy Act, as amended, 42 U.S.C. 4321, <u>et seq</u>	All plans in full compliance
Native American Graves Protection and Repatriation Act, 1990, 25 U.S.C. 3001-13, <u>et seq</u>	All plans in full compliance
Rivers and Harbors Act, 33 U.S.C. 401, <u>et seq</u>	N/A
Watershed Protection and Flood Prevention Act, 16 U.S.C. 1001, <u>et seq</u>	N/A
Wild and Scenic Rivers Act, as amended, 16 U.S.C. 1271, <u>et seq</u>	N/A
Water Resources Planning Act, 1965	N/A
Floodplain Management (E.O. 11988)	All plans in full compliance
Protection of Wetlands (E.O. 11990)	All plans in full compliance
Environmental Justice (E.O. 12898)	All plans in full compliance
Environmental Health and Safety (E.O. 13045)	All plans in full compliance
Farmland Protection Policy Act, 7 U.S.C. 4201, <u>et seq</u>	All plans in full compliance

Note: Full Compliance – Having met all requirements of the statutes, Executive Orders, or other environmental requirements for the current state of planning.

\* Denotes Additional Coordination Required

## **BIBLIOGRAPHY**

- Escheverria, John D. and Jamie Fosburgh, 1988. The American Rivers Outstanding Rivers List. American River Inc., Washington, D.C.
- U.S. Army Corps of Engineers. 1976. Final Environmental Statement: Great Salt Plains Lake, Salt Fork of Arkansas River, Oklahoma, Canton Lake, North Canadian River, Oklahoma, Fort Supply Lake, Wolf Creek, Oklahoma. USACE, Tulsa District, Tulsa, Oklahoma.
- U.S. Department of Agriculture, 1983. Soil Survey Legends for Prime Farmland Soils, Soil Conservation Service, Stillwater, OK.
- U.S. Department of Interior, 1989, National Wetlands Inventory Maps, U.S. Fish and Wildlife Service.

**APPENDIX I**  
**NEPA COORDINATION**



DEPARTMENT OF ARMY  
CORPS OF ENGINEERS, TULSA DISTRICT  
1645 SOUTH 101<sup>ST</sup> EAST AVENUE  
TULSA, OKLAHOMA 74128-4609  
SEP 22 2000

Environmental Analysis and Compliance Branch  
Planning Environmental and Regulatory Division

To Whom it May Concern:

The Tulsa District, U.S. Army Corps of Engineers (USACE) is proposing to modify the existing embankment at Canton Lake, Oklahoma, to ensure safety of the dam, as shown on the enclosed map. The District is soliciting public and agency comments on the proposed action in accordance with USACE Regulations for Implementing National Environmental Policy Act (NEPA) procedures published in (33 CFR 230.45 FR 56761, August 25, 1980; Amended by 46 FR 14745, March 2, 1981; Revised by 53 FR 3127, February 3, 1988). Your comments on the proposed action are requested to help determine the environmental impacts of the proposed action.

The project would consist of constructing a "fuseplug spillway" within the existing earthfill embankment near the east abutment of the Canton Lake spillway. The fuseplug would have a crest elevation of 1638.0 feet National Geodetic Vertical Datum (NGVD). In the event of a Probable Maximum Flood (PMF) event, the fuseplug would begin to fail at elevation 1638.0 feet NGVD and completely fail before the pool elevation became more than 1641 feet NGVD. The fuseplug would erode to a base elevation of 1625 feet NGVD.

The entire structure would require heavy concrete paving to withstand high water velocities and a downstream channel would not be required. However, paving on the backslope of the spillway would be required. The width of the fuseplug spillway would be 1340 feet in order to pass 269,360 cfs flow for the PMF.

A public meeting is schedule for October 2, 2000, at the Canton Lake Project Office Overlook Building, located northwest of Canton, Oklahoma, to provide the public additional opportunity to comment on the proposed action. A legal notice will be published 7 to 10 days prior to the meeting date in

selected area newspapers. In addition, press releases inviting the public to express their views at the scoping meeting will be distributed to the local/regional newspapers, television stations, and radio stations.


Comments on the proposed action should be sent to the following location:

Mr. David L. Combs  
Chief, Environmental Analysis and Compliance Branch  
U.S. Army Corps of Engineers  
1645 South 101 East Avenue  
Tulsa, Oklahoma 74128-4629

Comments may also be forwarded by E-mail to  
David.L.Combs@USACE.Army.Mil

Sincerely,



 David L. Combs  
Chief, Environmental Analysis and

Enclosure



Oklahoma City, OK 73102

Civil Defense

Watonga Civil Defense  
c/o Fire Department  
P.O. Box 564  
Watonga, OK 73772

Yukon Civil Defense  
Attn: David Chesher  
500 West Main  
Yukon, OK 73099

Office of Emergency Management  
Attn: John Clark  
800 North Portland  
Room 100  
Oklahoma City, OK 73107

Calumet Civil Defense  
Attn: Shawn Davis  
P.O. Box 267  
Calumet, OK 73014

Office of Emergency Management  
Attn: Robert Eastman  
P.O. Drawer 700  
El Reno, OK 73036

County Sheriff's Office

Blaine County Sheriff's Office  
Attn: Rick Ainsworth  
205 North Burford  
Watonga, OK 73772

Canadian County Sheriff's Office  
Attn: Lewis Hawkins  
208 West Rogers  
El Reno, OK 73036

Oklahoma County Sheriff's Office  
Attn: John Whetsel  
201 North Shartel  
Oklahoma City, OK 73102

Department of Environmental Quality

Bob Giger  
Department of Environmental Quality  
P.O. Box 165  
Burns Flat, OK 73624

Paul H. Brum  
Director/City Engineer  
City of Oklahoma City  
Public Works Department  
420 W. Main  
OKC, OK 74102

U.S. Department of the Interior  
U.S. Fish and Wildlife Service  
Oklahoma Ecological Services Field Office

222 South Houston, Suite A  
Tulsa, Oklahoma 74127 - 8909

Attn: Mr. Jerry Brabander, Field Supervisor

National Weather Service  
Arkansas Red River Basin RFC  
10159 East 11<sup>th</sup> Street, Suite 300  
Tulsa, OK 74128-3050

Federal Emergency Management Agency  
Region VI  
800 North Loop 288  
Denton, Texas 76210

Attn: Mr. Buddy Young  
Regional Director  
U.S. Department of the Interior  
U.S. Geological Survey  
202 N.W. 66 St., Building 7  
Oklahoma City, OK 73116

Attn: Ms. Kathy Peter

U.S. Department of the Interior  
Bureau of Land Management  
221 N. Service Road  
Moore, OK 73160-4946

Attn: Mr. Paul W. Tanner

U.S. Department of Agriculture  
Natural Resources Conservation Service  
Oklahoma State Conservationist's Office  
100 USDA Suite 206  
Stillwater, OK 74074-2655

Attn: Mr. Darrel Dominick

Governor Frank Keating  
Room 212 State Capitol Bldg.  
Oklahoma City, OK 73105

Oklahoma Wildlife Federation  
P.O. Box 60126,  
Oklahoma City, OK 73146

Attn: Margaret Ruff

Oklahoma Dept of Wildlife Conservation  
1801 N. Lincoln  
Oklahoma City, Oklahoma 73105

Attn: Greg Duffy

Oklahoma Water Resources Board  
3800 N. Classen Blvd.  
Oklahoma City, OK 73118

ATTN: Ken Morris

✓ Oklahoma Conservation Commission  
2800 North Lincoln Blvd., Suite 160  
Oklahoma City, Oklahoma 73105

Attn: Mr. Mike Thralls  
Executive Director

Mr. Tom Clapper  
Oklahoma State Senate  
Federal Action Monitor  
Room 310, State Capitol  
Oklahoma City, OK 73105

Mr. Mark S. Coleman  
Oklahoma Dept. of Environmental Quality  
1000 N.E. 10th Street  
Oklahoma City, OK 73105

Mr. Wayne T. Craney  
Water Quality Programs  
Department of Environmental Quality  
1000 N.E. 10th Street  
Oklahoma City, OK 73117-1212

Honorable Wallace E. Coffey  
Chairman  
Comanche Tribe of Oklahoma  
HC 32-Box 1720

Lawton, OK 73502

Cheyenne and Arapaho Tribes  
Public Information Office  
P. O. Box 38  
Concho, Oklahoma 73022  
Apache Tribe of Oklahoma  
P.O. Box 1220  
Anadarko, OK 73005

Attn: Honorable Henry Kostzuta  
Chairman

Kiowa Tribe of Oklahoma  
P.O. Box 369  
Carnegie, OK 73015

Attn: Honorable Billy Evans Horse  
Chairman

Wichita and Affiliated Tribes  
P.O. Box 729  
Anadarko, OK 73005

Attn: Honorable Gary McAdams  
President

Caddo Tribe of Oklahoma  
P.O. Box 487  
Binger, OK 73009

Attn: Honorable Noah Frank  
Chairman

Dr. Gary Schnell  
Oklahoma Biological Survey  
University of Oklahoma  
Sutton Hall  
Norman, OK 73069

Mr. J. Blake Wade  
State Historic Preservation Officer  
Oklahoma Historical Society  
Wiley Post Historical Building  
Oklahoma City, OK 73105

Dr. Don G. Wyckoff  
Oklahoma Archeological Survey  
111 E. Chesapeake  
Norman, OK 73019-0575

Honorable James M. Inhofe  
United States Senator  
1900 NW Expressway, Suite 1210  
Oklahoma City, OK 73118

Honorable Don Nickles  
United States Senator  
100 North Broadway, Suite 1820  
Oklahoma City, OK 73102

Honorable Frank D. Lucas  
Representative in Congress  
500 North Broadway, Suite 300  
Oklahoma City, OK 73102

Oklahoma Historical Society  
2100 N. Lincoln Blvd.  
Oklahoma City, OK 73105

Attn: Dr. Bob L. Blackburn  
Director

Oklahoma Natural Heritage Inv.  
Oklahoma Biological Survey  
2001 Priestly Ave., Building 605  
Norman, OK 73019-0543

Attn: Ms. Linda E. Watson  
405-521-2491

Oklahoma Farm Bureau  
2501 N. Stiles  
Oklahoma City, OK 73105-3126

Attn: Matt Wilson

Oklahoma Department of Agriculture  
2800 N. Lincoln Blvd  
Oklahoma City, OH 73152

Attn: Mr. Dennis Howard

Oklahoma Department of Transportation  
200 NE 21st Street  
Oklahoma City, OK 73105

Attn: Mr. Neal McCaleb  
Director

Canton Public Library  
PO Box 694  
Canton, OK 73724

Mayor, City of Canton  
301 N Garfield St  
Canton, OK 73724

Mayor, City of Watonga  
1st & Weigle St  
Watonga, OK 73772

Mayor, City of Calumet  
118 W 2nd St  
Calumet, OK 73014

Mayor, City of Yukon  
500 W Main St  
Yukon, OK 73099

Mayor, El Reno  
101 N Choctaw Ave  
El Reno, OK 73036

State Representative Clay Pope  
Route 1, Box 76  
Loyal, OK 73756

State Represnetative Elmer Maddux  
Route 1, Box 164-A  
Mooreland, OK 73852

State Senator Bruce Price  
P.O. Box 160  
Hinton, OK 73047

State Senator Owen Laughlin  
P.O. Box 1183  
Woodward, OK 73802

add



DEPARTMENT OF ARMY  
CORPS OF ENGINEERS, TULSA DISTRICT  
1645 SOUTH 101<sup>ST</sup> EAST AVENUE  
TULSA, OKLAHOMA 74128-4609

November 13, 2000

Planning, Environmental, and Regulatory Division  
Environmental Analysis and Compliance Branch

Mr. Jerry Brabander  
Field Supervisor  
U.S. Fish and Wildlife Service  
222 South Houston, Suite A  
Tulsa, OK 74127

Dear Mr. Brabander:

The Tulsa District, U.S. Army Corps of Engineers is preparing an Environmental Assessment addressing improvements to the Canton Dam Spillway, Blaine County, Oklahoma. The project consists of constructing a "fuse-plug spillway" within the existing earth fill embankment near the east abutment of the Canton Lake spillway. The entire structure would require heavy concrete paving in order to handle high water velocities, but a downstream channel would not be required other than paving the back slope of the spillway.

In accordance with Section 7 of the Endangered Species Act of 1973, as amended, the Tulsa District is requesting an official updated list of endangered or threatened species of concern for the above mentioned location in Oklahoma.

If you need additional information, please contact Mrs. Sandra Stiles at 918-669-4341.

Sincerely,

David L. Combs  
Chief, Environmental Analysis and  
Compliance Branch



## United States Department of the Interior

### FISH AND WILDLIFE SERVICE

Ecological Services  
222 S. Houston, Suite A  
Tulsa, Oklahoma 74127

January 5, 2001

David L. Combs  
Chief, Environmental Analysis and Compliance Branch  
U.S. Army Corps of Engineers  
1645 South 101 East Avenue  
Tulsa, Oklahoma 74128-4629

Consultation #2-14-OI-I-0293

Dear Mr. Combs:

The U.S. Fish and Wildlife Service (Service) has reviewed your request for a species list for the Canton Dam area in compliance with Section 7 of the Endangered Species Act (Act) of 1973, as amended. The U.S. Army Corps of Engineers (Corps) is preparing an environmental assessment for a "fuse-plug spillway" project at Canton Dam.

The federally-listed species that may occur in the proposed project area are the bald eagle (threatened), and the Arkansas River shiner (threatened). The Service does not have recent records of Arkansas River shiners in this area, but they historically occurred in the North Canadian River and no recent surveys have been conducted in the project area to determine their current status. Critical habitat for the Arkansas River shiner has been proposed just upstream of Canton Reservoir and any potential impacts should be addressed if the project may affect flows in the river upstream of the reservoir. Interior least terns (endangered) and whooping cranes (endangered) could also occur in the area during migration.

The Service greatly appreciates your cooperation in managing Corps projects to minimize impacts to federally-listed species and other important natural resources. If you have questions or require additional information, please contact Mr. Kevin Stubbs of this office at 918/581-7458, extension 236.

Sincerely,

Jerry J. Brabander  
Field Supervisor

cc: Director, Oklahoma Department of Wildlife Conservation, Oklahoma City, OK  
(Attn: Natural Resources Section)

APPENDIX II

SECTION 404  
CLEAN WATER ACT

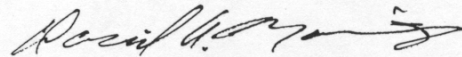
17 November 2000

MEMORANDUM FOR CESWT-PER-P, ATTN: David Combs

SUBJECT: Fuseplug on Canton Spillway

1. This is in regard to the U.S. Army Corps of Engineers proposed construction of a fuseplug spillway within the existing earthfill embankment near the east abutment of the Canton Lake spillway in accordance with the Flood Protection Act of 1946. The proposed project is located in Section 27, Township 19 North, Range 13 West, Blaine County, Oklahoma.
2. We have completed an evaluation of the proposal pursuant to Section 404 of the Clean Water Act. We have determined that the provided information does not indicate that a placement of dredged or fill material will be required, permanently or temporarily, into any "waters of the United States," including jurisdictional wetlands. Therefore this proposal is not subject to regulation pursuant to Section 404 of the Clean Water Act, and a Department of the Army (DA) permit will not be required.
3. If you have any questions, please contact Mr. William Jeffries at 918-669-4950.

Sincerely,



David A. Manning  
Chief, Regulatory Branch